1: Pelzer S-5 (1940-1941) 1945 AL1 Southeast Asia AL1

Chapter I

FROM HUNTING AND GATHERING TO AGRICULTURE

Hunting and Gathering

In Southeastern Asia today there are peoples of different cultural levels carrying on some of the major economies that man has developed in the course of time. The first people to invade the tropical forest regions around the South China Sea were alithic, or prepalaeolithic, food gatherers,[1] who obtained their food by collecting edible wild plants and by hunting and fishing. Today geographically separated peoples are still living in a prepalaeolithic or palaeolithic food-gathering and hunting stage.[2] In Southeastern Asia they are represented by the Semang of the Malay Peninsula, the Andaman Islanders, and the Aeta of the Philippines—all of whom are Negritos, or dwarfed Negroids—the Kubu of Sumatra, the Sakai of the Malay Peninsula, the Toala of Celebes,[3] and the Punan of Borneo.[4]

The degree to which collecting, hunting, or fishing contributes to the food supply varies with the season; it also varies with different peoples, depending upon the resources of the region, the type of equipment the people may possess, and the skills they may have acquired. Food-gathering and hunting peoples have a division of labor under which the men hunt while the women and children gather vegetable matter and catch insects and small animals. The men may lend a helping hand, however, in digging up some of the very deep-growing yams. Men will also participate in the picking of fruits, especially when it is necessary to climb tall trees. The food gatherers and hunters of Southeastern Asia are nomadic in the sense that they do not remain long in one place. However, they do not wander aimlessly through the jungle. Each group has its definite territory—among

---

Note: The titles of the works here cited in footnotes have been abbreviated, whenever possible. The full titles may be found in the Bibliography, p. 269 ff.

1 Nippold (Rassen- und Kulturgeschichte der Negrito-Völker, 1936, pp. 253–255 and 398–400) considers the alithic wood culture of the Negritos of Southeastern Asia to be older than palaeolithic culture. These people use wood rather than stone as raw material for their tools. Because of the perishable nature of wood, archaeologists and prehistorians have not yet been able, so far as I know, to go farther back than the palaeolithic age and therefore have not been able to confirm the hypothesis of an alithic age. Menghin (Weltgeschichte der Steinzeit, 1931, p. 91) believes that, from an archaeological point of view, an alithic wood culture may be regarded only as a possibility, but Kern (Die Anfänge der Weltgeschichte, 1933, p. 35), who compared pygmy culture with palaeolithic cultures, comes to the conclusion that alithic wood cultures probably preceded palaeolithic culture.

2 By divesting the word "palaeolithic" of its specific chronological connotation the term may be used for present-day peoples who have a food-gathering and hunting culture.

3 The racial affinities of the Kubu, the Sakai, and the Toala are not clear; by some they are called Veddoids, by others, Australoids.

4 They are considered to be Proto-Malays.

1: Pelzer - S-5 (1940-1941) 1945 AL1 Southeast Asia AL1

241 787 of the new ladang be a poor one. After three days the same person returns, and if he finds that the offerings have been scattered a new location is chosen and a new attempt is made to get a favorable answer from the spirits. In case the betel leaves have been found undisturbed, all male members of the village have a meal on the chosen land. Then the area is divided among the villagers by the headman. Each individual appeals to the spirits by placing a betel leaf with lime and areca nut on the ladang that has been turned over to him. If the answer is unfavorable he tries again. The betel leaf may be placed three times. If the offering is disturbed each time, the headman turns over a part of his share, which is considerably larger than any of the others, to the less fortunate villager. Throughout the following agricultural year with its stages of clearing, planting, and harvesting, the peasant repeatedly requires the services of the dukun, or *shaman*, as well as the betel leaf.

In other regions details differ, but the essential fact remains that the social-religious life and thinking of the shifting cultivator is bound up with his characteristic form of cultivation.

423 241 621 Shifting cultivators have no concept of private land ownership. The land belongs to the community, the tribe, or the village, and each member has the right to use as much land as he needs and can cultivate. The location of the land that he is to use may be decided upon by the village council or the headman. The person who clears the land and plants the crop gets the produce. Nobody has the right to plant a plot that has been cleared by someone else. As soon as the land is abandoned all rights are forfeited, except the right of the community. However, if trees have been planted, the ownership of the trees and their produce remains with the person who planted them, and he is given preference when the land has had a sufficient fallow period and can again be cultivated.

The Effect of Shifting Cultivation on the Land

241 134 311 As has been stated above, ladangs decline in fertility after the first crop, and obnoxious grasses and weeds appear among the stooling tree stumps. As long as there is an abundance of forest land at his disposal the cultivator prefers to abandon the ladang. Under favorable conditions the grasses will, in turn, give way to second-growth forest. In the course of centuries this second-growth forest may develop into a climax forest, that is, a forest having the same composition as the primeval forest. In any case, when tall forest growth again occurs, the land will have had time to recover its original fertility.

Unfortunately, however, conditions are often not sufficiently favorable for a regeneration of soil fertility and the development of a good second-growth forest. As a matter of fact, the practice of shifting cultivation has altered the character of vegetation beyond recognition over wide areas in Southeastern Asia. Instead of a dense primeval rain-forest, we now find

1: Pelzer S-5 (1940-1941) 1945 AL1 Southeast Asia AL1

Chapter III

THE SEDENTARY CULTIVATOR

Sedentary, or permanent, cultivation of land is much more vital to the economy of the countries of Southeastern Asia than is shifting cultivation. The majority of peasant cultivators obtain their livelihood by tilling the same piece of land year after year. The continuously utilized arable land, however, is not all cultivated in the same way throughout Southeastern Asia. We may distinguish three main categories of arable land: garden land, surrounding the houses and villages; wet land; and dry land. These three classes of land are devoted to different crops and vary so much from one another in size and reliability of yields, and therefore in value that in Java, for example, the social status of a man depends upon the type of land that he cultivates. There are districts in Java where only those peasants who own wet land, houses, and garden land have the full rights of a villager.

The Garden Plot

Garden culture on land surrounding peasant houses in Java is devoted to a large variety of crops, ranging from fruit trees to plants that are not required in large quantities but only to supplement the diet and add flavor to the daily rice meal. Ochse and Terra, who have made exhaustive studies of garden culture, are of the opinion that it is a remnant of "primitive grainless hoe culture," in which all the useful plants found in the forest were concentrated in plots near the dwellings. Originally, the number of plants grown in the garden was greater than it is today, for some plants have been taken out of this economy to be grown on a larger scale in fields. The origin of garden culture explains, according to Ochse and Terra, the truly amazing variety of plants that are found on garden land.[1] Sollewijn Gelpke, a leading expert on native agriculture in Java during the past century, remarked on the richness of the gardens:

> Whoever strolls around a compound and takes things in with a botanical eye will see before him a variety of plants of which the uninitiated can have no conception. . . . Such wealth of vegetation is still more impressive to him who approaches it from an economic point of view. He sees palms, bamboo, bananas, and other trees that resemble each other closely, bearing fruit and giving support to various climbing plants.[2]

Often one is able to distinguish three levels, or stories, in a garden. The ground story consists of low-growing plants, especially tuberous plants that tolerate shade, such as elephant yam (*Amorphophallus campanulatus* Bl.), white arrowroot (*Maranta arundinacea* L.), "purple arrowroot" (*Can-*

[1] Ochse and Terra: "Het onderzoek," 1934. See also Terra: "De voeding der bevolking," 1932, pp. 552–593.

[2] Sollewijn Gelpke: Naar aanleiding, 1901, p. 203.

1: Pelzer S-5 (1940-1941) 1945 AL1 Southeast Asia AL

rice takes up nitrogen in the form of ammonia, the value of green manures on wet-rice fields is apparent.[15] In the Indies, *Crotolaria* species are the most frequently used green manures, the favored one being *Crotolaria juncea* L.; but *Phaseolus lunatus* L., *Dolichos lablab* L., and *Pachyrrhizus erosus* Urban are also used. The peasants of the Red River delta in Tongking are in the habit of working into the ground the wilted matter of a number of legumes that have been grown primarily for seed. The peasants of the province of Nam Dinh have developed a technique that may be unique. They push handfuls of indigo branches into the ground between the rows of rice a few days after the latter has been transplanted, for they believe that indigo is superior to pig manure or human excreta. In Indochina rice-growers frequently cultivate green manure, especially *Crotolaria* species, on dry fields and carry it to the rice fields at the time when these fields are being prepared for the seedlings. A green manure used exclusively in a few districts of the delta land of Tongking is the small aquatic plant, *azolla*.[16] Certain villages, thanks to favorable circumstances, have specialized in the growing of azolla to sell to the surrounding country, while other villages reproduce the plant until sufficient quantities of green manure have been obtained to cover all needs. The life cycle of azolla is completed in the months from November to April or May. Only the villagers of LaVan know the secret of maintaining and multiplying the plant during the hot season. They guard this secret jealously since it is the basis of their livelihood.

Further studies are needed to establish which varieties of green-manure plants are best suited to the various environmental conditions. It is important to find plants that grow rapidly and can be sown when the rice is still on the field, just after the water has been drained off to allow the grain to ripen. Experiments should also be made in the timing of the application of green manure. Should it be early, or just before the transplanting of the seedlings? Should it be on dry or on wet land?

Crop rotation also has its place as a means of keeping up the fertility of wet-rice fields. This practice seems to be better developed and more prevalent in Java than in any other country of Southeastern Asia. Extensive areas of *sawah*, as the Javanese call their wet riceland, are planted with dry-field crops such as maize, legumes, and other vegetables during the dry season, a practice that has a beneficial effect upon the soil. This form of double cropping is probably better than raising two rice crops in one year, because—although a different variety of rice is chosen for each season—both make essentially the same demands upon the soil; whereas a peanut crop, for example, grown during the dry season will enlarge the nitrogen content of the soil. In some areas of Java lowland rice is rotated

[15] Imperial Bureau of Soil Science: Tropical Soils in Relation to Tropical Crops, 1936, p. 11.

[16] For a map showing the extent of the use of azolla, see Gourou: Les paysans, 1936, p. 392. For further discussion see Nguyên-cong-Tiêu: "L'azolle," 1930, B, pp. 335–350 (also in *Proc. Fourth Pacific Science Congress, Java, 1929*, Vol. 4, 1930, pp. 355–370).

called the "Great Tradition" in an agrarian society.[13]

The links between country and city in this basically feudal relationship were clear, consecutive, and relatively simple to define. To be sure, the villager would regard the capital as a different world from his own, but it was nevertheless a largely comprehensible world, if associated with abstractions and refinements beyond his immediate ken.[14] The modern great city of Southeast Asia, however, not only was different but was also incomprehensible to the child of the folk society, who came to regard it not merely as strange and foreign but also as hostile. The "foreignness" is reflected in their ethnic composition. Until the second World War at least the largest population group in Rangoon was Indian; Singapore is primarily a Chinese city; Bangkok is very largely Chinese, as is Saigon if Cholon, its twin city, is included; both Manila and Jakarta have large foreign and Chinese elements. To this extent the great city is more metropolitan than national. Each has its Chinese, European, and native quarters, for example, although in many instances the lines of division have become blurred, especially since the close of the war.[15] Furthermore, wherever Chinese populations are large, a predominant type of house is the so-called "shophouse," a two-or-more-story building with shops on the first floor, built to a standard width originally dictated by the length of the average fir-log lintel as used in South China, and with residential flats and

[13] See Robert Redfield and Milton Singer, "A Cultural Role of Cities," a working paper for the Conference on the Role of Cities in Economic Growth and Cultural Change, University of Chicago, May 24–26, 1954.

[14] Cf. J. M. van der Kroef, "The Indonesian City: Its Culture and Evolution," *Asia*, March, 1953.

[15] In Singapore the Chinese are localized according to the various so-called "clans," e.g., Hokkien, Cantonese, Tiuchiu, Hailams, and Hakka (see B. W. Hodder, "Racial Groupings in Singapore," *Malayan Journal of Tropical Geography*, October, 1953).

459